

We Claim as Our Invention:

1. A system for connecting a telecommunications device to a packet-switching communications network, the system comprising:

at least one telecommunications device which can be connected to a line-switching communications network;

a packet-switching communications network which can be used to transmit first data between a first subscriber line and a second subscriber line of the packet-switching communications network; an interface unit connected to both to the packet-switching communications network and to the telecommunications device,

10 the interface unit converting at least some of the first data, which is intended for the subscriber line using the packet-switching communications network, into second data of the line-switching communications network, and feeding the second data to the telecommunications device, and vice versa.

15 2. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claim 1, wherein the first and second data are user data.

20 3. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claim 1, wherein the first and second data are signaling data which contain signaling messages.

25 4. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claim 3, wherein the interface unit, via an interface program, converts the signaling messages of the packet-switching communications network into equivalent signaling message of the line-switching communications network.

5. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claim 4, wherein the conversion is carried out using equivalent signaling messages stored in a database.

5 6. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claim 4, wherein the interface program for signaling messages to which no equivalent signaling message is assigned is transmitted using a data packet as user data.

10 7. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claim 4, wherein the interface program generates messages which at least one of the packet-switching communications network and the line-switching communications network requires as an acknowledgement of transmitted signaling data.

15 8. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claim 3, wherein the signaling messages are used to make connection setups between the first and second subscribers.

20 9. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claims 3 wherein the signaling messages are used for at least one of activating, deactivating, and registering at least one service feature.

25 10. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claim 9, wherein the service feature comprises at least one of call pick-up, three-way conferencing, large-scale conferencing, holding, displaying of toll information, a closed user group, call

number identification, automatic callback when busy, automatic callback when no response, call barring, an indication of call waiting and call transfer.

11. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claim 3, wherein the signaling messages are transmitted in the packet-switching communications network independently of user connections.

12. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claim 3, wherein the signaling message of the line-switching communications network are DSS1 messages which are defined in the ITU Standards Q.931 and Q.932.

13. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claim 3, wherein the signaling messages of the packet-switching communications network are signaling messages of the H.225 signaling protocol Standard.

14. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claim 1, wherein the telecommunications device is at least one of an ISDN telephone, an analog telephone, an analog modem, an ISDN modem and an analog facsimile device.

15. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claim 1, wherein the telecommunications device is a private branch exchange.

16. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claim 1, wherein the interface unit is arranged in a separate physical unit.

17. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claim 1, wherein the interface unit is a module in the telecommunications unit.

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18. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claim 1, wherein a control unit of the interface unit automatically logs on the interface unit as a subscriber to the packet-switching communications network.

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19. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claim 1, wherein the interface unit has a control unit which converts the data using at least one program module.

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20. A system for connecting a telecommunications device to a packet-switching communications network as claimed in claim 1, wherein the packet-switching communications network is a network based on an Internet protocol.

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21. An interface unit which is connected both to a packet-switching communications network and to a telecommunications device which is provided for connection to a line-switching telecommunications network, comprising a control unit which converts at least one item of signaling information of the packet-switching communications network into an item of signaling information of a line-switching telecommunications network and feeds it to the telecommunications device, and vice versa.

22. An interface unit as claimed in claim 21, wherein the interface unit is used to connect a communications terminal to the packet-switching communications network.

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23. An interface unit as claimed in claim 21, wherein the interface unit is used to connect a private branch exchange to the packet-switching communications network.

5 24. A communications terminal which can be connected to a line-switching communications network and which is used for telecommunications, comprising an interface unit which is connected both to a packet-switching communications network and to a telecommunications device which is provided for connection to a line-switching telecommunication network, the interface unit
10 including a control unit which converts at least one item of signaling information of the packet-switching communications network into an item of signaling information of a line-switching communications network and feeds it to the telecommunications device, and vice versa.

15 25. A communications terminal as claimed in claim 24, wherein the interface unit is a module of the communications terminal.

20 26. A private branch exchange which can be connected to a line-switching communications network and which is used for telecommunications, comprising an interface unit which is connected both to a packet-switching communications network and to a telecommunications device which is provided for connection to a line-switching telecommunications network, the interface unit including a control unit which converts at least one item of signaling information of the packet-switching communications network into an item of signaling information of a line-switching communications network and feeds it to the telecommunications device, and vice versa, wherein the interface unit is used to connect the private branch exchange to the packet-switching communications network.
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27. A private branch exchange as claimed in claim 26, wherein the interface unit is a module of the private branch exchange.